

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020341**Date Inspected:** 08-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China**CWI Name:** Mr. LI YAN HUA**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Bay-14 Area:

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the deck panel diaphragm to floor beam weld joint located on 13BE at cross beam side, Panel Point (PP-120.5). The weld is designated as SEG3009H-006. The welder is identified as 067138. ZPMC QC Mr. ZHONG YONG HONG was onsite monitoring the welding variables. The welding variables were recorded at, current 304.6 Amps, Voltage 23.9 Volts. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2232-ESAB.

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the deck panel diaphragm to floor beam weld joint located on 13CE at cross beam side, Panel Point (PP-123.5). The weld is designated as SEG3011H-006. The welder is identified as 052696. ZPMC QC Mr. ZHONG YONG

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HONG was onsite monitoring the welding variables. The welding variables were recorded at, current 286.6 Amps, Voltage 25.7 Volts. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2232-ESAB.

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the anchorage plate to vertical shear plate weld joint located on 14E at bike path side. The weld is designated as SEG3019BB-179. The welder is identified as 067877. ZPMC QC Mr. GUO SHI HUI was onsite monitoring the welding variables. The welding variables were recorded at, current 261.8 Amps, Voltage 26.7 Volts. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2233-ESAB.

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the anchorage plate to vertical shear plate weld joint located on 14E at bike path side. The weld is designated as SEG3019BB-003. The welder is identified as 066763. ZPMC QC Mr. GUO SHI HUI was onsite monitoring the welding variables. The welding variables were recorded at, current 267.3 Amps, Voltage 26.2 Volts. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2233-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the vertical shear plate to bottom plate weld joint located on 14E at bike path side. The weld is designated as SEG3019BB-059. The welder is identified as 044772. ZPMC QC Mr. GUO SHI HUI was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as CWR-2737.

2. NDT:

Magnetic Particle Testing (MT):

MT carried out as per the ZPMC submitted Notification No 08319.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area that has been previously tested and accepted by ZPMC MT technicians. This QA Inspector generated a TL-6028 MT report on this date. The members are identified as grillage joints located on BAY-13. The weld designation numbers is as follows: SA3078C-001-223, 224, 225, 226, 227, 228, 231, 232, 235, 236, 237, 238, 239, 240, 262 & 263.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

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remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
